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**EVALUATION OF THE  
EFFECTIVENESS OF  
VOCATIONAL SYSTEMS IN  
ACHIEVING THEIR  
PURPOSES**

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July 1987

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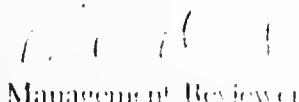
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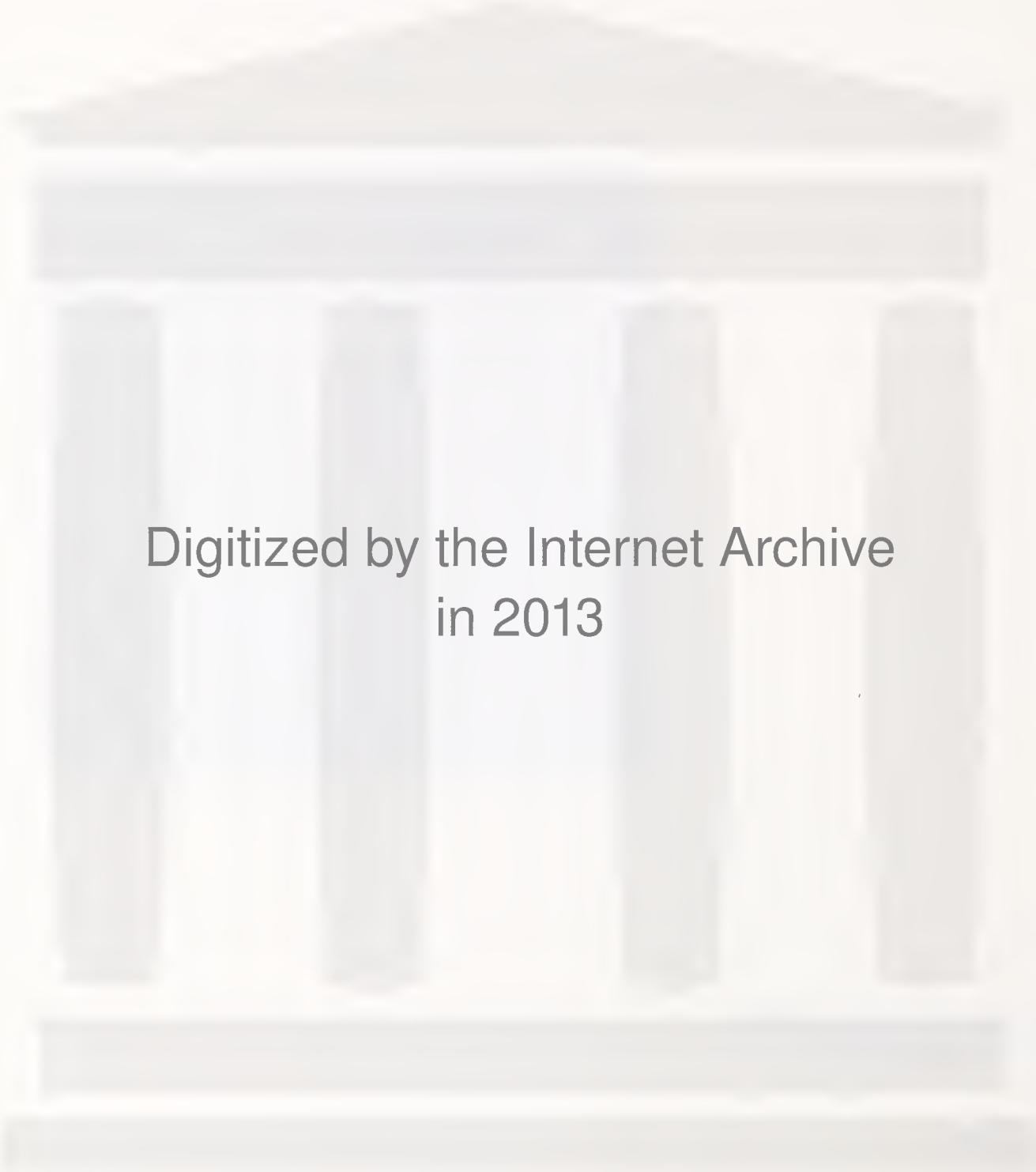
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## TABLE OF CONTENTS

	<u>Page</u>
VOCATIONAL EDUCATION GOALS IN LAW, REGULATION, AND STATE POLICY STATEMENTS.....	8
STATE POLICYMAKERS' GOALS FOR VOCATIONAL EDUCATION.....	19
PROVIDER SURVEY: IMPORTANCE AND ACHIEVEMENT OF GOALS.....	30
APPENDIX A: STATE VOCATIONAL EDUCATION POLICYMAKERS INTERVIEWED	
APPENDIX B: INTERVIEW GUIDE FOR STATE POLICYMAKERS	
APPENDIX C: COMMUNITIES AND RESPONDENTS IN THE LOCAL PROVIDERS SURVEY	
APPENDIX D: LOCAL TELEPHONE SURVEY SELECTED RESPONSES	

## TABLE OF EXHIBITS

Exhibit 1	Goals for Vocational Education in Massachusetts from Selected Federal and State Documents.....	9
Exhibit 2	Importance and Achievement of Goals for Secondary Vocational Education in Massachusetts, Local Provider Survey, March 1987.....	34
Exhibit 3	Importance and Achievement of Goals for Postsecondary Vocational Education in Massachusetts, Local Provider Survey, March 1987.....	37
Exhibit 4	Needed Improvements for the Massachusetts Vocational Education System, Local Provider Survey, March 1987.....	41

## EVALUATION OF THE EFFECTIVENESS OF VOCATIONAL SYSTEMS IN ACHIEVING THEIR PURPOSES

The State Council on Vocational Education conducts biennial evaluations of vocational education systems that are supported with federal funds. These systems include vocational schools, comprehensive high schools, community colleges, and community-based organizations. Such evaluations, which are federally mandated, are to consider the "...adequacy and effectiveness..." of vocational education delivery systems to achieve their "...purposes" as well as "...the adequacy and effectiveness of the coordination" between vocational education and programs funded by the Job Training Partnership Act (JTPA).<sup>1</sup>

The 1987 evaluation, conducted for the State Council by Abt Associates Inc., goes beyond the federal requirements to provide information of use to state policymakers concerned with vocational education issues. This study was designed to address three questions:

- What are the stated goals of vocational education in Massachusetts?
- How do state policymakers perceive vocational education and what are their goals for vocational education?
- In the view of vocational education providers, which goals are important and how well are those goals implemented?

The first and second questions consider expectations for and about vocational education in the Commonwealth as well as the commonality of those expectations, while the third explores the extent to which vocational education is seen as important and successful.

This study is unusual in that it looks at perceptions of goal attainment rather than at the effectiveness of individual programs. It is concerned with subjective assessments, not with "objective" measures of

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<sup>1</sup>The State Council on Vocational Education is conducting the evaluation of coordination between vocational education and JTPA.

program achievement, such as student test scores or placement rates, dropout rates, or employer satisfaction.

Studying the importance and perceived achievement of vocational education goals in Massachusetts comes at a particularly auspicious time. During the past four years, there has been sustained and intensive attention given to educational reform and school improvement. The passage of Chapter 188, in particular, exemplifies Massachusetts interest in and commitment to restructuring its public education system.

For the past two years, state policymakers have been considering a more comprehensive strategy for education and employment in the Commonwealth. Task force reports, legislative bills, and preliminary discussions among key policymakers have all addressed coordination and consolidation issues.

Continuing concern has also been expressed about the quality of public education, especially in large urban areas. Between a third and a half of the high school students in Massachusetts' largest cities fail to graduate from high school, and a sizable number of graduates have few marketable skills.

Heightened interest also comes from within business and industry. Massachusetts is enjoying an economic boom. Its current unemployment rate is the lowest among industrialized states. However, this economic success is largely dependent on employing and maintaining a knowledgeable and highly skilled workforce. Consequently, additional economic growth is seen as constrained by a shortage of well-educated and trained personnel. As one policymaker noted: "We're running out of skilled workers and we can't afford to waste a single person."

Another impetus comes from dramatic reductions in federal support for employment and training programs. The state appears willing to provide some support, especially if a policy framework can unite the panoply of employment and training programs currently funded.

Preliminary steps to a more coordinated education and employment strategy include clarifying the goals of education and employment training systems and exploring the interrelationships among systems. The perceived effectiveness of vocational education systems in achieving their goals could

facilitate discussion and development of a comprehensive strategy for education and employment in Massachusetts.

#### Design of This Evaluation

This evaluation of the goals of vocational education in Massachusetts encompassed three separate informational sources which led to three separate but related analyses. Each of the three parts of the study is briefly described below.

The first task for this study was to identify and categorize vocational education goals and objectives contained in federal and state laws and regulations and in state plans or policy statements. Until this study was undertaken, no definitive list of goals existed. Massachusetts is the recipient of federal funds through both the Carl D. Perkins Vocational Education Act and the Job Training Partnership Act; Chapter 74 focuses on the organization and governance of vocational schools and programs. These laws and their accompanying regulations list multiple goals and objectives. Policy statements prepared by the State Board of Education and the Board of Regents also present vocational education goals for the Commonwealth. All of these documents were reviewed to obtain information on goals; then, these data were summarized and compared. The final product of this analysis was a matrix of goals by source.

Interviews with key state policymakers were the second part of the study. Thirteen state policymakers who influence policy and/or funding for vocational education were identified by the State Council. The list of interviewees was not all inclusive but representative of individuals who could play central roles. They were asked for their views on the most important goals for vocational education, and changes they would recommend for the vocational education system. Policymakers were also asked whether or not they saw a role for vocational education in employment and economic development in Massachusetts, and, if so, what role was appropriate.

After the state policymaker interviews were completed, a telephone survey was conducted with fifty professionals either in the field of vocational education or in related fields in ten Massachusetts communities. The survey asked respondents to rank the importance, in their opinion, of various vocational education goals and to also indicate how well they felt the

goals are being achieved. Respondents were also given a list of possible system improvements and asked to rank their importance. Finally, their impressions of strengths and weaknesses of vocational education were elicited.

To summarize, it was necessary to identify and list the goals of the Massachusetts vocational education system in order to evaluate the system in terms of its purposes. The views of policymakers were regarded as important because they might put forth additional goals. Also, policymaker perceptions of goal importance and achievement were reviewed to understand and explicate the extent of agreement between state policymakers and local providers. The goals statements in the local provider questionnaire were based on information obtained during the document review as well as on information drawn from state policymaker interviews.

Below we present an overview of results from these three study components.

#### Results of the Evaluation

A comparison of state and federal laws and regulations as well as state plans and policy statements produced the following results:

- A multiplicity of goals for vocational education. The goals, listed in these documents, can be categorized into five topical areas: student outcomes, equal access provisions, economic development, system improvement, and system coordination.
- A lack of established priorities for the multiple goals set forth by the various laws, plans, and policy statements. Examples of allowable activities are sometimes listed, but neither measurable objectives nor performance standards are offered.
- Only one comprehensive statement of goals--the State Plan for Vocational Education in Massachusetts. The plan is produced for federal compliance purposes and generally includes the goals of other state documents.
- Chapter 74 regulations briefly state student outcome goals but are mainly concerned with program approval criteria. Chapter 74 focuses primarily on the establishment, organization, and governance of vocational schools and programs. It also deals substantially with the certification of personnel.

- Major definitional discrepancies in statements about students' learning employment skills. Chapter 74 requires specific skills training, while other documents appear to encourage more career exploration and general work skills.

State policymakers concentrated on what they saw as the most important goals for vocational education. Throughout the interviews, policymakers repeatedly referred to vocational education as a separate, self-contained system with inner workings that are not generally well-known to policymakers. Major findings are:

- Substantial agreement that at the secondary school level, vocational education should concentrate on providing a comprehensive education, buttressed with career exploration and learning in work settings. All policymakers saw specific skills training as the most important goal of postsecondary vocational education, while skills training at the secondary level was given a mixed response.
- Noticeable differences in the emphasis on and proposed methods for increasing participation in vocational education by unserved or underserved groups. Half of the respondents strongly criticized vocational education for serving too narrow a group and for not taking more affirmative steps, while the remaining respondents were less concerned with this issue or questioned the efficiency or consequences of targeting.
- Clear agreement that vocational education's primary role in economic development is seen as adult retraining and skills upgrading.
- A lack of consensus on needed vocational education system improvements. Suggestions ranged from improving programs, staffing, and administration within the system to conducting more or different outreach to special population groups and instituting statewide fiscal reform.
- Strong emphasis on the lack of and resulting need for state and local system coordination, particularly between vocational education and employment and training programs.

Telephone interviews with local providers of vocational education produced the following results:

- Remarkable agreement on the importance of goals for both secondary and postsecondary education. In fact, four of the five goals ranked as most important for secondary vocational education were also identified as four of the five most important goals for postsecondary education. These goals are: enhancing students' career decisionmaking; ensuring access to vocational education for unserved and underserved groups; providing hands-on learning for students; and teaching students specific occupational skills.
- Virtually total agreement among respondents that, for both secondary and postsecondary vocational education, the Massachusetts vocational system is not achieving most of its stated goals. An exception to this finding is that between 60 and 70 percent of the local respondents felt that the Massachusetts secondary-level vocational education system achieves two goals: teaching students specific occupational skills and providing "hands-on" learning for students.
- Agreement between local respondents and state policymakers that secondary vocational education should provide students with a comprehensive education (ensuring basic skills).
- Local respondents were much more likely than state policymakers to see specific skills training as an important goal for secondary vocational education.
- Agreement among local respondents that postsecondary vocational education should provide students with specific occupational skills and create a skilled workforce.
- Clear consensus, unlike the disparate views expressed by state policymakers, on the importance of ensuring access to the vocational education system to a variety of special populations.
- A clustering of needed improvements for vocational education in Massachusetts. Between 85 and 90 percent of local respondents identified the following system improvements: coordination between vocational education and employment and training programs; stronger local linkages with other educational programs; increased funding; higher quality of professional staff development; and development of opportunities for students to have work-related experience.
- Agreement between state policymakers and local providers that system coordination is an important goal of and necessary improvement for the Massachusetts vocational education system. Local providers felt that state-level coordination was poorly achieved or not achieved at all.

### Organization of This Report

The remainder of this report is organized into three sections; each section corresponds to one of the analyses described above. The first section presents a matrix listing the goals identified in federal and state documents. Goals are then described and discussed. An analysis of state policymakers' views on vocational education goals comprises the next section, while the third section details local providers' views of the importance and achievement of vocational education goals. Each succeeding section integrates results of preceding tasks in order to provide a continuum of information across the three study components. That is, the goals obtained from documents constituted the basis of the state policymaker interviews. These information sources were combined to construct goals statements for the local provider questionnaire. Then, state policymaker responses on goal importance and achievement are compared with results from the local provider survey to identify consensus and disparity of opinion.



## VOCATIONAL EDUCATION GOALS IN LAW, REGULATION, AND STATE POLICY STATEMENTS

There are a series of documents--some regulatory, some planning or policy materials--that contain goals for vocational education in Massachusetts. Chapter 74 of Massachusetts law and its accompanying regulations outline the goals for state programs. The Massachusetts State plans written in response to the Carl D. Perkins Vocational Education Act and the Job Training Partnership Act elaborate federal goals in vocational education and employment training, respectively. These goals affect programs funded through the federal sources. The State Board of Education and the Board of Regents have also released policy statements on vocational education in Massachusetts. The State Board of Education has outlined goals in two separate documents: the 1976 Comprehensive Policy on Occupational Education and the 1984 Policy Statement on Public School Youth, Education, and Employment. Most recently (1987), the State Board of Education and the Board of Regents issued a Joint Policy on Occupational Education.

The goal statements attached to federal and state law (that is, the Perkins Vocational Education Act, Chapter 74, and the Job Training Partnership Act) are important because they guide individual program operations. For local programs to receive federal funds, for example, they must design programs that are based on and reflect stated federal goals. The policy statements from the State Board of Education and Board of Regents, on the other hand, are designed to guide the design and operation of vocational education across the Commonwealth.

All of the documents listed above were reviewed, and goals statements were abstracted from the larger publications. Five categories of goals were identified: student outcome goals, equal access goals, economic goals, system improvement goals, and system coordination goals. Overall findings are briefly stated below, then each category is discussed in more detail. Noted are anomalies and differences among federal and state laws and policies. Exhibit 1 is a matrix of 25 abbreviated goals statements.<sup>2</sup>

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<sup>2</sup>The exact wording of the goal statements included under each category appears in a separate report submitted to the State Council on Vocational Education.

EXHIBIT 1

GOALS FOR VOCATIONAL EDUCATION IN MASSACHUSETTS FROM SELECTED FEDERAL AND STATE DOCUMENTS  
STUDENT OUTCOME GOALS

	Perkins Vocational Education Act	Mass State Plan for Vocational Education	Chapter 74 Vocational Education Plan (JTPA)	Mass Training and Employment Plan (JTPA)	Comprehensive Policy on Occupational Education	Joint Policy on Occupational Education	Policy Statement on PS Youth, Education and Employment
Master basic skills	x	x	x	x	x	x	x
Learn employment skills	x	x	x	x	x	x	x
Enhance career decisionmaking		x	x	x	x	x	x
Reduce dropout rates for students					x	x	x
Promote economic self-sufficiency					x	x	x
Reduce welfare dependency					x	x	x
Promote development of student interests					x	x	x
Provide opportunities for continuing education					x	x	x

	Perkins Vocational Education Act	Mass State Plan for Vocational Education	Chapter 74 Vocational Education	Mass Training and Employment Plan (JTPA)	Comprehensive Policy on Occupational Education	Joint Policy on Occupational Education	Policy Statement on PS Youth, Education and Employment
<b>Ensure equal access for all students, especially:</b>							
<b>Minorities</b>	x	x	x	x	x	x	x
<b>Females</b>	x	x	x	x	x	x	x
<b>Limited English-proficient</b>	x	x	x	x	x	x	x
<b>Handicapped</b>	x	x	x	x	x	x	x
<b>Economically disadvantaged</b>				x	x	x	x
-- generally	x	x	x	x	x	x	x
-- in areas of high unemployment/ high dropout rates	x	x	x	x	x	x	x
<b>Dropouts</b>				x	x	x	x
Women and men in nontraditional occupations	x	x	x	x	x	x	x
Single parents/displaced homemakers	x	x	x	x	x	x	x
Pregnant/parenting teens				x	x	x	x
Unemployed/underemployed adults	x	x	x	x	x	x	x
Incarcerated persons	x	x	x	x	x	x	x
<b>Ensure enrollments reflect diversity of the service area</b>							
Take positive steps to ensure participation of underrepresented groups	x	x	x	x	x	x	x
Provide more diversified occupational education options				x	x	x	x

**GOALS FOR VOCATIONAL EDUCATION IN MASSACHUSETTS FROM SELECTED FEDERAL AND STATE DOCUMENTS**  
**ECONOMIC GOALS**

	Perkins Vocational Education Act	Mass State Plan for Vocational Education	Chapter 74 Employment Plan (JTPA)	Mass Training and Employment Plan (JTPA)	Comprehensive Policy on Occupational Education	Joint Policy on Occupational Education	Policy Statement on PS Youth, Education and Employment
Promote economic growth and development	X			X			X
Provide economic development assistance to specific geographic areas	X			X			X
Retrain displaced and dislocated workers	X			X	X	X	
Create a skilled workforce	X			X		X	
Coordinate and share information with other public agencies and private sector organizations involved in economic development	X			X	X	X	

**GOALS FOR VOCATIONAL EDUCATION IN MASSACHUSETTS FROM SELECTED FEDERAL AND STATE DOCUMENTS**  
**SYSTEM GOALS**

	Perkins Vocational Education Act	Mass State Plan for Vocational Education	Chapter 74	Mass Training and Employment Plan (JTPA)	Comprehensive Policy on Occupational Education	Joint Policy on Occupational Education	Policy Statement on PS Youth, Education and Employment
Provide vocational education <sup>a</sup>	X	X			X	X	X
System Improvement	X			X	X	X	X
Offer guidance and counseling support services	X	X	X	X	X	X	X
Encourage and support the development of creative and alternative materials and curricula	X	X		X	X	X	X
Develop programs which provide opportunities for work-related experience	X	X	X		X	X	
Improve labor-market relevance of vocational educational programs	X	X	X		X	X	
Support and improve the quality of professional development		X			X	X	

<sup>a</sup>This general goal on the provision of vocational education is included here to set the context. It is not a measurable program objective.

**GOALS FOR VOCATIONAL EDUCATION IN MASSACHUSETTS FROM SELECTED FEDERAL AND STATE DOCUMENTS**  
**SYSTEM GOALS**

	Perkins Vocational Education Act	Mass State Plan for Vocational Education	Chapter 74	Mass Training and Employment Plan (JTPA)	Comprehensive Policy on Occupational Education	Joint Policy on Occupational Education	Policy Statement on PS Youth, Education and Employment
<b>System Coordination</b>							
Promote system coordination and cooperation and cooperation between and among:							
-- State agencies, all school levels providing vocational education, and providers of employment and training	X	X	X	X	X	X	X
-- Local service providers	X	X	X	X	X	X	X
-- Public agencies and the private sector	X	X	X	X	X	X	X
Eliminate duplication of services			X	X	X	X	X

## Overview

Federal and state laws, regulations, and policies promote a multiplicity of unranked goals for vocational education. However, most documents list four goals for vocational education students, whether they are enrolled in secondary or postsecondary vocational education programs:

- Ensure students master basic skills;
- Ensure students learn employment skills;
- Enhance students' career decisionmaking;
- Promote opportunities for continuing education.

Chapter 74 calls for specific occupational skills training, while the other documents reviewed here encourage career exploration and learning in work settings.

Equal access for all students is uniformly required, especially for minorities, females, as well as limited-English-proficient and handicapped persons. All laws and policies, except Chapter 74, also require vocational education to take positive steps to ensure the participation of underrepresented groups. Although new initiatives focus increasingly on dropouts and reducing dropout rates, neither federal nor state vocational education law specifically mentions dropouts as a special client group.

Economic development is a specific vocational education goal in federal law, the Massachusetts State Plan for Vocational Education, and the 1976 Board Policy Statement on Occupational Education. Most documents support coordination among agencies involved in economic development. Chapter 74 urges only that vocational education create a skilled workforce.

Goals for improving vocational education are shared across all laws and policies, with improving the labor market relevance of vocational education and strengthening guidance and counseling heading the list. All documents, except Chapter 74, also promote curriculum development efforts.

Lastly, all laws and policies, excluding Chapter 74, promote system coordination and cooperation between and among state providers, local providers, public agencies and the private sector.

Unlike other more comprehensive laws and policies, Chapter 74 regulations describe student outcome goals but are mainly concerned with program approval criteria. It does not address economic development, program coordination, or curriculum development.

### Student Outcome Goals

State and federal law as well as state policy statements list multiple outcomes for students in vocational education. The student outcome goals listed most often include: ensuring students master basic skills; ensuring students learn employment skills; enhancing career decisionmaking for students; and providing opportunities for continuing education.

The most critical difference among the documents concerns what students should learn as "employment skills." Chapter 74 calls for specific skills training "in a specific trade, technical or occupational field requiring specialized technical skills for entry into that field." The Massachusetts State Plan, the Board of Education's Comprehensive Policy on Occupational Education, and the federal Perkins Act appear much less restrictive and seem to encourage more career exploration and learning of general work skills. They call for "acquiring the skills necessary to obtain and succeed in a job relative to their career objectives" or obtaining "marketable skills." The differences in goal statements highlight a familiar question about vocational education: To what extent should vocational education concentrate on specific occupational skills training for its own sake? The Massachusetts State Plan for Vocational Education, State Board of Educational policy statements, and federal law support a broader meaning to employment skills, while Chapter 74 supports specific skills training as an end in itself.

The Joint Policy on Occupational Education and the State Plan for Vocational Education promote the development of student interests as an explicit goal; only the Policy Statement on Public School Youth, Education, and Employment explicitly calls for vocational education to reduce dropout rates for students. In line with its focus to improve the employment of disadvantaged populations, the Massachusetts Training and Employment Plan (JTPA) includes goals to promote economic self-sufficiency and reduce welfare dependency. Because JTPA's primary goal is training rather than education,

its basic skills goals are more constrained than the objectives for vocational education: they concentrate on functional literacy related to specific employment skills.

#### Equal Access Goals

All of the documents listed in Exhibit 1 explicitly require that vocational education ensure equal access for all students, especially for such unserved or underserved groups as minorities, females, and limited-English-proficient and handicapped students. Access for economically disadvantaged persons is also highlighted in all but two policy documents: the Comprehensive Policy on Occupational Education and the Joint Policy on Occupational Education.

The federal Perkins Act and the Massachusetts State Plan for Vocational Education have a broader and more inclusive list of target populations than other documents. They include single parents and displaced homemakers, unemployed and underemployed adults, and incarcerated persons. In addition, federal funds under the Perkins Act are targeted to areas with high unemployment or high school-dropout rates, although the law does not specifically mention dropouts as a client group.

Dropouts and at-risk students are cited in the Board's Policy Statement on Public School Youth, Employment, and Education; in the Massachusetts Training and Employment Plan (JTPA); and in the State Plan for Vocational Education. The latter states that vocational educators are to "assist school districts to coordinate with other community agencies to identify out-of-school youth and to develop employment preparation programs and services for this group."

In addition to ensuring equal access, all vocational education laws and policy statements except Chapter 74, also require that vocational education programs ensure the participation of underrepresented groups. The Massachusetts State Plan for Vocational Education encourages technical assistance in recruitment and staff development as well as the creation of model projects in nontraditional programs. The Comprehensive Policy on Occupational Education strongly supports outreach programs. The Board's Policy Statement on Public School Youth, Education, and Employment calls for "hiring staff representatives of both sexes and diverse economic backgrounds,

as well as staff who are disabled, to provide all students with adult role models." Unlike the others, Chapter 74 states a nondiscrimination policy.

#### Economic Development Goals

Coordinating and sharing information with other agencies and organizations involved in economic development are encouraged. Other frequently cited goals are: creating a skilled workforce and retraining displaced and dislocated workers. The Perkins Act, the Massachusetts State Plan for Vocational Education, and the Joint Policy on Occupational Education explicitly promote economic growth and development, including the provision of economic development assistance in specific geographic areas. Chapter 74 and the Board of Education's Policy Statement on Public School Youth, Education, and Employment contain limited mention of economic development goals; the only explicit reference to economic development is creating a skilled workforce.

#### System Improvement Goals

Improving the labor market relevance of vocational education programs is cited in all of the laws and policy statements on vocational education, as is offering guidance and counseling support services. Encouraging and supporting creative and alternative materials and curricula are also urged in most vocational education plans and policy statements.

The Massachusetts State Plan for Vocational Education, for example, specifically encourages incorporating math and science principles into curriculum and materials development for high-technology occupations. The Comprehensive Policy on Occupational Education encourages flexible vocational education programming which would incorporate relevant academic skills. The development of alternative educational programs is suggested in the Board's Policy Statement on Public School Youth, Education, and Employment. The Joint Policy on Occupational Education specifically addresses the need for and development of articulation policies between secondary and postsecondary institutions. Chapter 74 encourages vocational programs to provide opportunities for work-related experience.

### System Coordination Goals

The Perkins Act, the State Plan for Vocational Education, the State JTPA Plan, and the three policy statements all promote system coordination and cooperation between and among state providers, local providers, public agencies, and the private sector and emphasize joint planning or collaborative relationships. Two activities are particularly noted: state collection and dissemination of occupational demand and supply data and state provision of information on training opportunities. The most specific coordination language appears in the Massachusetts Training and Employment Plan (JTPA) "to increase the effectiveness of training programs through sequenced services . . . among different kinds of institutions, such as community-based agencies, comprehensive high schools, and community colleges, and upon a case management system . . . [to] make use of existing administrative structures and not create new institutions." JTPA also provides funding for system coordination.

Chapter 74 does not address coordination goals. Nor does Chapter 74 include a goal to eliminate duplication of services, although the Massachusetts State Plan for Vocational Education, the Massachusetts Training and Employment Plan (JTPA), and the Joint Policy on Occupational Education urge that duplicated services be eliminated.

As shown in the matrix, federal and state laws, regulations, and policies promote a multiplicity of goals for vocational education. Comparing similarities and differences among them may facilitate future discussion of vocational education goals in Massachusetts. The views of state policymakers toward vocational education goals are presented in the following section.



## STATE POLICYMAKERS' GOALS FOR VOCATIONAL EDUCATION

The views of state policymakers were the second part of the study. Although not an exhaustive list, the interviewees represented individuals who could play key roles in the future directions of and support for vocational education in the Commonwealth. During the interviews, state policymakers provided their perceptions and opinions about the most important objectives of vocational education, and its role in the larger context of education, employment training and economic development in Massachusetts. Suggestions for system improvement were also elicited.

Their views were regarded as important because they might put forth additional goals to those appearing in the written documents. Also, policymakers' perceptions of goal importance and achievement would serve to understand and explicate the extent of agreement between state policymakers and local providers.

Among state policymakers, vocational education in Massachusetts is seen as a separate, closed system. Policymakers repeatedly referred to vocational education as "insulated, off by itself," a "separate fiefdom," or a "self-contained world." One policymaker also saw the vocational education community shutting itself off from planning efforts for a more comprehensive state strategy for education and employment:

During the last two years, state policymakers have been interested in making vocational education part of a comprehensive strategy of literacy and training and employment. Meanwhile, the voc ed folks circled the wagons rather than responding to the political and economic realities of the larger world.

Several respondents noted that relations between vocational education and employment and training programs have improved over the last two years, but they also cited "long-standing friction" between the two systems.

Many senior policymakers lacked information about vocational education. Half of the policymakers interviewed said they knew little about

vocational education or had not explored the issue.<sup>3</sup> Others said it was difficult to obtain information from the vocational education community. State policymaker knowledge of vocational programs is therefore fragmented and incomplete.

Responses to interview questions are briefly summarized below. More detail is provided in discussions organized into the five categories used in the preceding section. The interview guide used is contained in Appendix B.

### Overview

In contrast to laws, regulations, and policy statements which offer a comprehensive set of goals, state policymakers concentrated on the more general objectives for vocational education in Massachusetts. At the secondary level, most policymakers thought vocational education should provide a comprehensive education, buttressed with career exploration rather than specific skills training and they suggested that vocational education programs should capitalize on being an alternative form of learning. Specific-skills training was seen as the most important objective of postsecondary vocational education. Policymakers also urged more attention to the adult market and stronger coordination with employment and training programs. There was less consensus among policymakers about system improvements in vocational education; recommendations ranged from internal system improvements to fiscal reform and expanded outreach efforts.

### Student Outcome Goals

Secondary vocational education. When asked what the most important goals of vocational education should be at the secondary level, all state policymakers responding cited a "good," comprehensive general education.<sup>4</sup> As described below, specific skills training at the secondary level was given a mixed, but mostly negative, response. Most respondents saw secondary vocational education as the time for career exploration and career planning

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<sup>3</sup>In addition, the two policymakers, who declined to be interviewed, offered lack of knowledge about vocational education as their reasons for not meeting with us.

<sup>4</sup>Eleven of the 13 policymakers interviewed answered this question.

rather than specific skills training, and some feared that vocational education may prematurely channel students' options.

Six policymakers thought career information should be provided but not specific skills training, including one respondent who thought there should be no vocational education at the secondary level. Two other policymakers thought skills training should be combined with a general education, while another thought training should be provided to work in an industry but not for a specific employer. Lastly, two policymakers thought skills training should be provided only for those students who currently needed jobs or who had no postsecondary education potential.

Four state policymakers saw secondary vocational education as providing an alternate "hands-on" mode of instruction, either in the school setting or in well-structured work experiences. This mode of instruction was seen as beneficial for a variety of students, especially those students who experience difficulties learning in the traditional lecture mode used for high school instruction.

Four policymakers were concerned that vocational technical schools may focus too heavily on trades and may not prepare students for additional education. As one respondent noted:

The vocational technical people claim they convey fundamental knowledge, so their students are admissible to four-year colleges. Should students who finish be capable of gaining admission without traditional academic courses? My personal conviction is no, they should not.

In other policymakers' views, the vocational technical schools provide a comprehensive education sufficient for pursuit of postsecondary education, but the schools' name and image obscure their comprehensive focus. As one policymaker reported:

I'm concerned that others think going to a regional vocational technical school means going immediately to work. That doesn't help with the education component they provide.

Another policymaker who thought that "vocational schools should see themselves as feeders into the community college system," suggested that vocational schools change their name. The generic term "voc-tech" school, he said, gives

". . . the impression of kids learning trades and the impression becomes reality."

Postsecondary vocational education. State policymakers showed a remarkable degree of consensus about the goals of postsecondary vocational education. All remarked that postsecondary vocational programs should provide specific occupational training, whether in certificate or associate degree programs, as well as retraining and upgrading of skills for adult workers.<sup>5</sup> A number of respondents praised community colleges for their creative and entrepreneurial spirit in setting up programs responsive to changing labor market needs. Postsecondary vocational education programs were perceived as more flexible and better able to respond to labor market needs.

Whether current resources in secondary and postsecondary vocational education should be shifted met with a mixed response. One-third of the interviewees favored more resources in postsecondary and adult vocational education and less emphasis at the secondary level; another third favored no change from the current distribution; and the last third gave no opinion or said they needed additional information before responding.

#### Equal Access Goals

State policymakers were split on the emphasis the vocational education system should give to ensuring equal access to vocational programs by unserved or underserved populations. Of the ten policymakers who discussed equal access goals, five criticized the vocational education system for serving too narrow a group and for not taking more affirmative steps to expand its student population. One respondent said:

There are pressing needs for the poor and people of color. About half of the Hispanic population is poor . . . Neither secondary nor postsecondary vocational education sees them as their customers.

Another policymaker noted:

Vocational education needs to justify itself as an educational strategy for the disadvantaged. The issue is how to connect

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<sup>5</sup>Three of the 13 state policymakers interviewed did not offer opinions about the goals of postsecondary vocational education.

vocational education with nontraditional populations . . . The perception is that vocational education is not hospitable to high-risk students.

Another policymaker placed equity issues as his top priority for vocational education. He was especially concerned about urban minorities and feared that "...we are unconsciously writing off an entire generation of black males..." and that "...we can't let them fall through the cracks." Another policymaker urged that vocational educators also direct more attention to pregnant and parenting teenagers. More specifically, he recommended that enrollment in the consumer and homemaking program be limited to that group.

The remaining five policymakers were either less concerned about equal access issues or expressed concern about the methods used to ensure access of special population groups to vocational education. One thought the vocational education and employment and training system should be "rationalized" so that training needs rather than targeting provisions drive the system. Another saw that targeting was less efficient but was impressed with the results of Chapter 766, ensuring special needs children access to public education. One respondent felt that opportunities were available in vocational schools and that equal access was not an issue. Lastly, one was concerned that the proportion of special populations in vocational education would become too large, saying:

Soon the system won't have a large enough student body that is representative of the community. The handicapped will be too big a part. The vocational schools will be called "second class" if only the handicapped and women in nontraditional careers [enroll].

#### Economic Development Goals

Of the 11 respondents mentioning economic development goals for vocational education, nine thought that vocational education could play a strong role in adult retraining and skills upgrading, especially in community colleges. Several policymakers saw vocational education as a vehicle for continuing lifelong learning, noting that vocational education should not be restricted to adult retraining when a plant closes down or some other change occurs in a particular industry. Several respondents urged vocational technical schools to explore the adult market.

Two did not see economic development as a primary goal for vocational education, especially not for vocational education at the secondary level. Rather, they thought vocational education was in the "education business" and should concentrate on student needs. One was especially concerned that economic development not drive the vocational education system. While he said, "It may be more efficient to have all education and employment under one czar who then decides who should get served..." he felt the needs of students, especially disadvantaged and minority students, would be lost. Another respondent noted that vocational education should have economic development goals, but also argued that "an economic perspective can not ignore the 30 to 50 percent dropout rate in cities."

#### System Improvement Goals

There was no consensus among the policymakers interviewed about what system improvements were most important in vocational education. The suggestions offered, however, can be grouped into three categories: fiscal reform, internal system improvements, and expanded outreach efforts.

Fiscal reform was mentioned by four of the ten policymakers who offered suggestions. Most frequently mentioned was a review of current funding formulae for vocational schools. Current funding arrangements were labeled "outmoded." Several respondents said that existing funding methods led to competition for students between vocational schools and comprehensive schools. One specific suggestion was to "expand the school building assistance law so the vocational technical schools, with help from the state, could leverage funds for the larger purchases they need to make."

Internal system improvements ranged from calling for system self-evaluation to improving staffing and administration, programming, and access.

Two policymakers encouraged vocational schools to engage in self-analysis. In the words of one policymaker: "Vocational schools are in a self-evaluation mode, and we should be encouraging that." Another respondent said that vocational schools contain "...a mishmash of skills in a place with a confused mission," and argued that "...vocational schools need to reexamine their function, clientele and needs."

Three policymakers offered suggestions about staffing. Two urged staff development for teachers, one recommended support systems for teachers, and a third suggested that "we need more trades people in schools." One policymaker had two suggestions about the administration of vocational schools. He said the boards of vocational schools should be "lay boards, not interlocking directorates," and vocational schools should be headed by "more vocationally oriented leaders."

Programming suggestions included more use of cooperative vocational education--integrating classroom learning with work experience. Cooperative vocational education was not only seen as pedagogically sound but also as financially attractive by reducing school equipment costs. One policymaker urged the State Department of Education to establish performance standards for vocational education, set up incentive grants, and support a more visible collection of demonstration projects to improve curricula.

Several policymakers perceived that disadvantaged populations had limited access to vocational education and urged vocational education to be more responsive to a broader range of students. Toward that end they urged vocational educators to create more flexible scheduling and programming, to provide more structured work experience programs, and to expand guidance and counseling services.

Outreach efforts were suggested to help counter vocational education's perceived negative image and to break the isolation associated with the vocational education system. One policymaker suggested:

The vocational schools have to advertise what's going right. They have to pitch their product [--an alternative for learning--] better.

His view was shared with two other policymakers who also felt that the comprehensive nature of vocational school education was not communicated well. To break the isolation of vocational education, several policymakers suggested vocational educators take the initiative in more joint ventures with employment and training providers and community colleges. One policymaker was particularly concerned that vocational educators had to be "bludgeoned" into such cooperative work. Another suggested that vocational schools follow the lead of community colleges in becoming more "creative and entrepreneurial,"

and several policymakers suggested vocational schools more actively pursue the adult market for skills retraining.

#### System Coordination Goals

All policymakers spoke of the need for more coordination between vocational education and other programs. They emphasized the necessity of joint undertakings because of constrained resources, particularly reflected in substantial cuts in federally funded employment and training programs.

Four categories of coordination goals were identified:

- vocational education vis-a-vis employment and training;
- vocational education vis-a-vis business and industry;
- secondary vis-a-vis postsecondary vocational education programs; and
- vocational schools vis-a-vis comprehensive high schools.

For most policymakers, coordination issues centered on the relationship between vocational education and employment and training. Several were optimistic that increased state-level coordination would be forthcoming. Interest in coordination was high, they said, and cited legislative bills, a gubernatorial task force report, and preliminary administrative discussions, as well as the intent among key policymakers to talk together.<sup>6</sup> Others mentioned pressure from business and industry to provide both a skilled workforce and the means to upgrade skills on a continuing basis in order to maintain the current economic boom in the Commonwealth. In spite of interest in coordination, policymakers were circumspect for the most part about the specifics of coordination and consolidation efforts.

Policymakers discussed the need for coordination both for greater efficiency and for better serving client needs. Numerous references were made to the "patchwork" of employment and training programs, and several cited

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<sup>6</sup>The Commonwealth Employment Forum, commissioned by the Governor, issued a report in October 1985, analyzing current programs and making recommendations for improving the state's training and placement policies.

statistics from the Senate Committee on Ways and Means that "...\$370 million is spent on 25 separate programs administered by five secretaries and two boards."<sup>7</sup> As one policymaker said:

[Massachusetts must] maximize resources so that you don't have two or three established groups or institutions attempting to do the same thing badly.

He went on to add:

Fueling the fiefdoms is not useful. We need to pool resources to bring these groups together to accomplish joint goals.

Others argued that some consolidation was needed to serve clients better. Clients, they argued, needed an articulated system that provided a continuum of services with easy entry and exit points, that used a case management approach, and that acknowledged the need for lifelong learning.

Resolving coordination issues was seen as difficult. A typical comment among policymakers was the following:

We're grappling with coordination now. No one disagrees with consolidation generally...[or with the]...need for closer coordination.

Coordination was discussed within the network of existing institutions. As one respondent noted, "We're not looking to reinvent the wheel." Another warned against "sidewinders jerking the system around."

The most tangible sign of state-level coordination was the frequent mention of creating a state-level "table" or forum for discussing coordination issues. Usually referred to as a "Jobs Cabinet," the forum would include the Secretaries of Economic Affairs, Labor, and Human Resources; the Chancellor of Higher Education, the Commissioner of Education, and the Governor's advisors for education, economics, and human resources.

Closer relationships between vocational education and business and industry were urged by a number of policymakers. Some urged cooperation to

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<sup>7</sup> Senate Committee on Ways and Means. "The Massachusetts Job Training and Placement Puzzle." Boston: The Committee, December 23, 1976, p. 1.

enhance student learning, such as using work settings to reinforce basic skills or to provide students with greater awareness of working environments. Others urged closer ties with business and industry to design programs in line with current and projected labor market needs.

A few policymakers made specific suggestions. One thought the relationships between regional JTPA Private Industry Councils (PICs) and local advisory councils for vocational education should be clarified. Another recommended that PICs play a larger role in "letting educators know what employers' needs are." A third policymaker suggested a single council to administer human resource funds in each region and recommended that an expanded PIC fulfill that function.

Projecting labor market needs was raised as a continuing problem by some policymakers. While some criticized vocational schools as slow to respond to employer needs, others saw delays within business and industry. As one policymaker noted:

Industry needs to enhance its ability to be reactive to future needs so school can [then] gear [programs] more sensitively.

Several policymakers gave examples of what they saw as successful local coordination efforts among employers, vocational education, and employment and training programs. One involved a major industry converting its production technologies. Depending on employee needs, services were provided by the local vocational school, the community college, and the Skills Center. Another effort coordinated activities among the Massachusetts Teachers Association, a high technology industry, and a community college to provide a two-year program in technical writing for teachers laid off through Proposition 2-1/2.

Greater coordination between secondary and postsecondary institutions was urged by three policymakers who described current efforts as "very inadequate." Two were critical of "turf battles" over funding. One noted "nothing is gained by refusing to admit there are other players with legitimate roles to play," and the other surmised "an articulated system probably would have gotten a better budget than [each] fighting for a separate piece." A third policymaker thought there was now increased understanding

between vocational schools and community colleges, because "resources are so limited that they cannot afford to compete with each other. They don't necessarily have solutions, but they are groping."

Coordination issues at the secondary school level were rarely mentioned, although one policymaker thought "the real challenge" was to have good vocational schools while maintaining comprehensive high schools. He was joined by another policymaker in criticizing the funding and student assignment formulae as inflexible; they argued that these formulae resulted in schools competing for the same students. Another policymaker urged a stronger role for the Department of Education with regard to secondary vocational education programs, suggesting the department use its mandated state plan less as a federal compliance document and more as an enabling mechanism or action plan with performance objectives and incentive grants.

For the most part, policymakers steered clear of discussing details of coordination and did not comment on the likely future of current legislative proposals. Except for the possible creation of a cabinet-level forum for discussing issues, state-level coordination is unlikely to be implemented without strong gubernatorial backing or clear signals from the legislature.



## PROVIDER SURVEY: IMPORTANCE AND ACHIEVEMENT OF GOALS

This section of the report describes the results of a telephone survey of local providers of vocational education and related programs. The survey comprises the third and final piece of this consideration of the goals of vocational education in Massachusetts. Survey respondents expressed remarkable agreement on the importance of goals for both secondary and postsecondary vocational education. In fact, four of the five goals ranked as most important for secondary vocational education were also considered as four of the five most important goals for the postsecondary vocational education system. Respondents also agreed that, at present, the Massachusetts vocational education system is not achieving most of these objectives.

Results also indicate that local providers agreed with state level policymakers that secondary vocational education should provide students with a comprehensive education (basic skills). However, local providers were much more likely than state policymakers to identify teaching secondary level students specific occupational skills for the Massachusetts system. Some 80 percent thought it an important goal and 71 percent thought it well achieved. There was also agreement among local providers that providing specific skills was the most important goal of postsecondary education. Ninety percent saw the goal as important, while 60 percent thought it well achieved.

Unlike the state policymakers, who gave a mixed response, local providers agreed that an important goal of both secondary (third most important) and postsecondary (fifth most important) vocational education is ensuring access to the vocational system to a variety of unserved and underserved populations. Local respondents chose providing hands-on learning to students as an important goal for both the secondary (83 percent) and postsecondary (85 percent) vocational education systems. Also, a majority of local providers, 69 percent and 58 percent respectively, felt that this goal was one of only two that was being well-achieved at the secondary and postsecondary levels.

With regard to system improvement, local providers agreed with state policymakers about the importance of system coordination not only as an important goal but also as a needed improvement within the vocational education system. Further, local providers reported that state-level

coordination of vocational education with employment and training was either poorly achieved or not achieved at all. A majority (85 to 90 percent) of local respondents agreed that in addition to local-level coordination four other improvements were needed in Massachusetts. These improvements are: improving local linkages with other education programs; improving quality of professional staff development; increasing funding for vocational education; and developing opportunities for students to gain work-related experience.

### Conduct of the Survey

This survey focused on obtaining information at the local level about the importance and achievement of vocational education goals in Massachusetts. Fifty providers of vocational education or related programs in ten Massachusetts communities were identified as potential respondents. Criteria for selection of communities included size, location, and economic situation. The last criterion was included because the Perkins Act requires that 50 percent of the funds must go to communities determined by the state to be economically depressed. A list of communities in the sample appears in Appendix C.

Within each community, five categories of respondents were identified. These categories were:

- vocational education directors or principals of comprehensive high schools
- superintendents of area or city vocational technical schools
- presidents of community colleges
- regional JTPA directors
- directors of community-based organizations (CBOs) or members of local vocational education advisory councils.

Thus, the sample includes both large and small communities as well as a fairly broad range of professionals in the fields of vocational education, employment/training, and education. Indeed, the five categories of respondents represent the five Commonwealth vocational education systems which receive federal funds. Study resources precluded drawing a random sample,

which would allow generalization of survey findings across the universe of vocational education providers in the Commonwealth. However, it is reasonable to assume that these results can be treated as indicative of the views of the larger population.

After localities and respondents were identified, letters explaining the survey and copies of the questionnaire were mailed to all fifty respondents. Within a week of the mailing, telephone interviews were scheduled to obtain responses. This several step process was employed to ensure a high response rate. Interviews were completed with 48 of the 50 identified respondents, for a 96 percent response rate.

The survey instrument asked respondents to rank (on a five-point scale) the importance and achievement of short lists of goals which were drawn from the matrix presented earlier in this report and modified to reflect comments by state-level policymakers. The twenty-five goals from the matrix were synthesized into shorter listings of goals for the questionnaire. A more synthesized listing of goals was prepared to limit respondent burden (time needed to complete the survey).

One goal that did not appear in the documents--providing "hands-on" learning for students--was identified by most state policymakers and was included in the lists of goals in the survey instrument.

Separate lists of goals were prepared for secondary and postsecondary vocational education. As can be seen from the lists of goals in Exhibits 2 and 3, the postsecondary goals list contained three fewer items than the secondary list. The goals eliminated from the postsecondary list are: ensuring that students master basic skills; preventing students from dropping out of school; and enabling students to pursue post-high-school education.

In addition, respondents were asked to rank the importance of needed improvements to Massachusetts vocational education. The final questions in the survey, which were open-ended inquiries, asked local vocational education providers to identify the strengths and weaknesses of vocational education in Massachusetts. (A copy of the itemized responses to the survey appears in Appendix D.)

While the questionnaire did not group goals into the five categories appearing in the discussion of the matrix and state policymaker goals, the analytic discussion that comprises the remainder of this report does group responses into these goal categories.

In the discussion below, we have combined responses to simplify the reporting of survey results. To create a "positive" ranking for either goal importance or achievement, we have combined all responses at the upper end of the five-point scale. That is, responses in categories one and two were totaled to achieve a single category. Similarly, to create a "negative" ranking, all responses at the other end of the five-point scale (categories four and five) were totaled to form a single ranking. Also, only total responses are reported. Perhaps because the survey sample size was quite small, no differences in response rates could be identified between/among categories of respondents.

#### Secondary Vocational Education

Exhibit 2 displays survey responses on the importance and achievement of goals for secondary vocational education in Massachusetts. The goals are ordered by respondents' perception of their importance. As the data in the exhibit indicate, virtually all respondents (44 of 48, or 92 percent) agreed that the most important goal for secondary-level vocational education is to ensure that students master basic skills. There was also broad agreement (between 81 and 88 percent of respondents) on four other goals: enhancing students' career decisionmaking; ensuring access to vocational education for unserved and underserved groups; providing "hands-on" learning for students; and teaching students specific occupational skills. Finally, 79 percent of respondents said they considered creating a skilled workforce as an important goal for vocational education at the secondary level.

About three-quarters of the respondents agreed on the importance of coordinating vocational education and employment and training at the local level. Similar numbers of respondents said preparing special population groups for employment and preventing students from dropping out of school were important secondary vocational education objectives. It is interesting to note here that while only one document mentioned dropout prevention as a goal, three-quarters of the local-level vocational education professionals identified it as a system goal.

## Exhibit 2

**Importance and Achievement of Goals for  
Secondary Vocational Education in Massachusetts  
Local Provider Survey  
March 1987**

Goal	Importance		Achievement	
	Number <sup>a</sup>	Percent	Number <sup>b</sup>	Percent
Ensure that students master basic skills	44	92	16	33
Enhance students' career decisionmaking	42	88	15	31
Ensure access to vocational education for unserved and underserved groups	41	85	14	28
Provide "hands-on" learning for students	40	83	33	69
Teach students specific occupational skills	39	81	34	71
Create a skilled workforce	38	79	18	38
Coordinate vocational education and employment and training at the local level	37	77	16	33
Prepare special population groups for participation in the workforce	37	77	7	15
Prevent students from dropping out of school	36	75	6	13
Enable students to pursue post-high-school education	29	60	9	19
Coordinate vocational education and employment and training at the state level	28	58	9	19
Promote economic growth and development	28	58	14	28

N = 48

<sup>a</sup>Number of respondents ranking the goal as very important or important.<sup>b</sup>Number of respondents ranking the goal as very well achieved or well achieved.

About 60 percent of the telephone interviewees considered the remaining three goals to be important, so all of the goals included in the survey were labeled as important by more than half of the respondents. It is useful to note here that no goals were labeled as unimportant by a majority of respondents. Two goals, promoting economic growth and development and preventing students from dropping out of school were ranked of little importance or not important at all by 15 and 10 percent of the respondents, respectively.

Of the five goals labeled as important for secondary vocational education, four are student outcome goals, and the fifth is an access goal. An economic goal (creating a skilled workforce) appears as sixth most important. When respondents were asked to limit their choices by indicating the three most important goals for vocational education at the secondary level, the same five goals were chosen, but the order was slightly different, and fewer respondents agreed on goal importance when they were asked to limit their choices. Ensuring that students master basic skills again emerged as the most important goal and also as a consensus goal, in that it was chosen by 39, or 81 percent, of the respondents. Teaching students occupational skills, providing "hands-on" learning for students, and ensuring access for unserved and underserved groups were all chosen by many fewer respondents--15 (32 percent) of the respondents as most important. These three goals moved ahead of enhancing students' career decisionmaking, which was chosen by 14 respondents.

The third and fourth columns of Exhibit 2 report respondent rankings of goal achievement. It seems clear that most respondents felt that Massachusetts is experiencing limited success in achieving most of its vocational education goals for secondary education. In particular, only a third of the respondents felt that the goal labeled as most important (ensuring that students master basic skills) is very well-achieved or well-achieved. The objectives ranked as second and third most important (enhancing career decision-making and ensuring access for unserved and underserved groups) fared even less well, with fewer than a third of the respondents indicating that these goals were very well-achieved or well-achieved.

More positively, however, the next two goals in the rank-ordered list (providing hands-on learning and teaching students specific occupational

skills) were ranked as very-well or well-achieved by a majority of respondents (69 and 71 percent, respectively). Respondents also chose these two goals when they were asked to indicate the three goals that are best-achieved by the Massachusetts secondary-level vocational education system. Not quite three-quarters (71 percent) of the local respondents said they felt providing "hands-on" learning to students was the best-achieved goal, while 63 percent chose teaching students occupational skills as the best-achieved goal.

A third of the respondents held the view that vocational education and employment and training are well-coordinated at the local level; however, only 19 percent said that such coordination is well-achieved at the state level. In fact, 22 respondents (or 46 percent) said that state-level coordination was poorly achieved or was not occurring at all.

Slightly more than one third (38 percent) of the local providers said that secondary vocational education in Massachusetts contributes to creating a skilled workforce, while less than one-third (28 percent) felt that vocational education promotes economic growth and development.

As noted earlier in this discussion, three-quarters of the respondents identified preventing students from dropping out of school as an important goal. However, 38 percent of the respondents said that this objective was poorly met or not met at all. In this same vein, about three quarters (77 percent) of the local providers said that preparing special population groups for workforce participation was an important goal. Not quite a majority (42 percent) of the respondents indicated that they felt this goal was poorly achieved or not achieved.

#### Postsecondary Vocational Education

Respondents were also asked about the importance of a series of goals for postsecondary education. Results of this part of the telephone survey are displayed in Exhibit 3. As a review of the table indicates, there is a greater concentration of agreement about goal importance for postsecondary vocational education than was reported for the secondary system. That is, more respondents agreed on the importance of more goals. This agreement may be an artifact of the shorter goals list for postsecondary education. The list did not include ensuring students master basic skills, preventing students from dropping out of school, and enabling students to pursue post-high-school education.

Exhibit 3

Importance and Achievement of Goals for  
 Postsecondary Education in Massachusetts  
 Local Provider Survey  
 March 1987

Goal	Importance		Achievement	
	Number <sup>a</sup>	Percent	Number <sup>b</sup>	Percent
Teach students specific occupational skills	43	90	29	60
Create a skilled workforce	43	90	23	48
Provide "hands-on" learning for students	41	85	28	58
Enhance students' career decisionmaking	40	83	17	35
Ensure access to vocational education for unserved and underserved groups	39	81	17	35
Coordinate vocational education and employment and training at the state level	35	73	7	15
Coordinate vocational education and employment and training at the local level	35	73	12	25
Prepare special population groups for participation in the workforce	35	73	15	31
Promote economic growth and development	34	71	14	28

N = 48

<sup>a</sup>Number of respondents ranking the goal as very important or important.

<sup>b</sup>Number of respondents ranking the goal as very well achieved or well achieved.

Two goals were identified as most (and equally) important by 43 (90 percent) of the respondents: teaching students specific occupational skills and creating a skilled workforce. Closely following the first two objectives, with 85 and 83 percent of the respondents noting their importance, were: providing hands-on learning for students and enhancing students' career decisionmaking.

The fifth most important goal (chosen by 81 percent of the respondents) was ensuring access to vocational education for special population groups.

Four of the five goals indicated as very important for postsecondary education were also chosen by respondents as very important for secondary education. The rank order of importance is somewhat different between the two categories. The difference in ranking most likely reflects the emphasis of skills training in postsecondary vocational education whereas secondary vocational education emphasizes the importance of providing students with basic skills, as well as the provision of specific skills training. Also, the latter goal, ensuring mastery of basic skills, was not included in the postsecondary list.

As the sixth most important goal for postsecondary vocational education, respondents chose coordination of vocational education and employment and training programs. System coordination efforts at both the state and local levels were identified by slightly less than three-quarters (73 percent) of the respondents as the sixth and seventh most important goals. For secondary vocational education, slightly more than three-quarters of local providers placed local coordination as the sixth-ranked goal. State coordination, however, was not ranked as high for secondary vocational education--only a slight majority (58 percent) of the respondents chose it as an important goal.

The final two goals on the postsecondary list are preparing special population groups for workforce participation and promoting economic growth and development, identified by 73 and 71 percent of respondents as important.

None of the goals in the list was clearly identified as not important by local providers.

Like the goals listed as most important for secondary vocational education, three of the five most important postsecondary goals (teaching students specific occupational skills, providing hands-on learning, and enhancing students' career decisionmaking) are student outcome goals. As we have already noted, ensuring access to vocational education for special population groups--obviously an access goal--was included among the five most important goals for both secondary and postsecondary education. However, the second-ranked goal on the postsecondary list was an economic objective--creating a skilled workforce.

With regard to choosing the three most important goals for postsecondary vocational education in Massachusetts, respondents chose the same five goals discussed above. Like the rankings reported for the secondary system, the order is slightly different. However, the two goals noted as important in the discussion above were also chosen as the two most important goals when respondents were asked to limit their choices among goals. Teaching students specific occupational skills was chosen as most important by 27 (56 percent) of the local providers. A majority of respondents (25, or 52 percent) chose creating a skilled workforce as the most important goal for postsecondary vocational education. Enhancing students' career decisionmaking was chosen by 18 (38 percent) of the respondents, and providing hands-on learning to students (which ranked three on the overall list) was chosen as one of three most important goals by only 25 percent of the local providers.

Turning to achievement of goals for postsecondary vocational education in Massachusetts, there are remarkable similarities between the survey results with regard to goals achievement for postsecondary education and the responses obtained on secondary education. As a review of Exhibit 3 will indicate, there is widespread agreement that most of the postsecondary vocational education goals are not being achieved, just as there was about the achievement of objectives for secondary vocational education. In addition, the two goals (teaching students specific occupational skills and providing hands-on learning) chosen by a majority of respondents (60 and 58 percent, respectively) as being very-well or well-achieved within the postsecondary vocational education system are the same--and only--two goals respondents indicated as being very-well or well-achieved within Massachusetts' secondary-level vocational education system. Not surprisingly, when respondents were

asked to indicate the three goals best achieved by the Massachusetts postsecondary vocational education system, they choose teaching students specific occupational skills (27, or 56 percent) as the best-achieved goal.

Slightly less than half (48 percent) of the respondents indicated that the second of the two most important postsecondary goals (creating a skilled workforce) was either very-well or well-achieved.

Just over a third (35 percent) of the local providers reported that, at the postsecondary level, there was achievement of enhancing students' career decisionmaking and ensuring access to vocational education for unserved and underserved groups. Of importance here with regard to the ensuring-access goal is that more than one-quarter (27 percent) of the respondents said that the postsecondary vocational education system in Massachusetts is achieving this goal poorly or not achieving it at all.

Less than a third of the respondents (31 percent and 28 percent, respectively) said that, at the postsecondary level, there was achievement of the goals of preparing special population groups for workforce participation and promoting economic growth and development. One quarter of the respondents felt that the special population groups objective was being achieved poorly or not at all.

Finally, 25 percent of the respondents said that system coordination was well-achieved at the local level. Only 15 percent felt such coordination was being well-achieved at the state level. In fact, almost a quarter (21 percent) of the respondents said that local-level coordination was poorly achieved or not achieved, while close to a third (31 percent) felt that state level coordination was poorly achieved or not achieved. Respondent views and opinions about system coordination at the secondary level were not dissimilar. Local-level secondary system coordination was considered to be well-achieved by about a third of the respondents. However, findings on state-level achievement of system coordination goals for secondary vocational education were as negative as the results for the postsecondary level. Further, as we noted in our discussion of state policymaker views, they strongly emphasized the lack of and great need for state-level coordination of vocational education programs, in general, and with employment and training efforts, in particular.

## Improvements to Vocational Education

Local providers were also asked to identify the most important improvements needed by the Massachusetts vocational education system. Responses appear, in rank order, in Exhibit 4. The list of improvements was generated from state policymaker interviews and from objectives and activities mentioned in federal and state documents. Seven improvements were chosen by 83 to 88 percent of respondents. Somewhat disappointingly, respondents evidenced quite limited differentiation across their choices of needed vocational education system improvements.

Local provider opinion on goal importance and lack of achievement are expressed again here through their indication of the need for local-level system coordination (not only with employment and training but also with other educational programs) as the most needed improvement for Massachusetts vocational education. State policymakers had also emphasized the need for local (and state) system coordination.

Not surprisingly, 41 (or 85 percent) of the local respondents identified increased funding for vocational education as a needed improvement to the Massachusetts vocational education system.

System improvements per se were also identified as important by substantial numbers of respondents. Eighty-five percent of respondents felt that improving quality of professional staff development was an important improvement as was developing opportunities for work-related experience; 83 percent chose modernizing and updating equipment; 83 percent of respondents also chose improving labor marking relevance of vocational education programs; 75 percent indicated promoting the use of new materials and developing curricula as an important improvement; and 73 percent chose expanding guidance and counseling support services. State policymakers also listed these activities as important directions for Massachusetts vocational education.

Not quite three-quarters (71 percent) of the local providers said that improving state-level coordination of vocational education and employment and training was an important improvement. Given the perceived lack of achievement of this goal, it is a little surprising that this item was not ranked higher in the list of needed improvements.

Exhibit 4

Needed Improvements for the Massachusetts  
Vocational Education System  
Local Provider Survey  
March 1987

Goal	Number	Percent
Improve local-level coordination of vocational education and employment and training	42	88
Improve local linkages with other educational programs (e.g., secondary/postsecondary)	42	88
Improve quality of professional staff development	41	85
Increase vocational education funding	41	85
Develop opportunities for work-related experience	41	85
Improve labor market relevance of vocational education programs	40	83
Modernize and update equipment	40	83
Promote new materials and curricula development	36	75
Expand guidance and counseling support services	35	73
Improve state-level coordination of vocational education and employment and training	34	71
Develop new models for delivering vocational education	33	69
Expand recruitment for special population groups	27	56

N = 48

<sup>a</sup>Number of respondents ranking this improvement as very important or important.

Similarly, it is somewhat surprising that expanding recruitment for special population groups was ranked as the least important improvement. Providing access to vocational education was considered one of the five most important goals for both secondary and postsecondary vocational education, and respondents did not consider that goal to be well-achieved. In fact, with regard to the postsecondary system, more than a quarter of the respondents felt that the access goal was being achieved poorly or not achieved at all. Consequently, it is not unreasonable to expect that expanding recruitment of these groups might be considered as one of the most important improvements.

When respondents were asked to choose the three most needed improvements to vocational education in Massachusetts, there was again a lack of differentiation among choices (although system coordination disappeared as a needed improvement) and almost no consensus. While improving the quality of staff development was chosen as most needed, less than half (16, or 33 percent) of the local providers chose this item. Other improvements listed by at least 25 percent of the respondents include: increase funding (31 percent); develop opportunities for work-related experience (27 percent); modernize and update equipment (27 percent); expand guidance and counseling support services (27 percent); develop new models for delivering vocational education (27 percent); and improve labor-market relevance of vocational education programs (25 percent).

#### Strengths and Weaknesses of Vocational Education in Massachusetts

The last items on the local agency questionnaire were open-ended questions asking respondents for their views on the greatest strengths and weaknesses of the Massachusetts vocational education system. Their responses are summarized below.

Strengths cited most often by local providers reflected their rankings of goal importance and achievement. They also are similar to comments obtained during interviews with state policymakers. Providing hands-on learning (as an alternative to the traditional lecture mode) and conveying real-world skills were listed as strengths by a number of respondents. Others said instilling the work ethic was an important strength. More generally, vocational education was seen as the only educational effort addressing the realities of both the academic and economic worlds. Some respondents felt

that the vocational education system provides "job opportunities" for its graduates. Also mentioned as a strength were the federal set-aside funds for disadvantaged, handicapped, and limited-English-proficient students and for students pursuing non-traditional occupations, reflecting earlier respondent rankings of the importance of special population access to vocational education.

However, survey respondents tended to concentrate on the weaknesses of the system, listing a negative public image, system rigidity and fragmentation, and administrative inadequacies as the most serious problems. Again, these issues were also raised by state policymakers.

Local providers felt that the "community," and the "public," and sometimes vocational educators themselves have a "negative image" of the vocational education system. Comments referenced the public image of vocational students as "second-class citizens." One respondent said that "...people believe that vocational education is for someone else's son or daughter."

Respondents also saw staff in vocational schools and programs undervaluing such education. In the words of one respondent: "...vocational education is more important than its educators think....They believe the public's opinion."

Examples of system rigidity and fragmentation include Chapter 74's time distribution requirements; "...state requirements that don't allow for local variation"; "obsolete" offerings in secondary schools; and premature slotting of students into vocational fields ("...thirteen-year-olds can't choose a vocation").

Administrative issues particularly focused on a lack of "creative leadership" especially in the area of curriculum design. Several respondents mentioned that innovators tend to exit the system rather than join it. A number of respondents listed staff training as a needed improvement.

Not surprisingly, given the responses to the questions on goal importance and achievement, coordination was seen as problematic at all levels and among all parties. Respondents also noted a lack of creative leadership with regard to coordination among the vocational education system, the employment and training system and other educational and training programs.

Funding (or rather the lack of it) was mentioned as a "serious" weakness. Reliance by secondary vocational schools and programs on local funding sources and state constraints on funding for community colleges were emphasized as problematic.

This study has explored the expectations for vocational education in the Commonwealth, the commonality of those expectations, and the extent to which vocational education goals are seen as important and successful. It is hoped that this study, conducted for the State Council on Vocational Education, will be of use to policymakers and providers concerned with the future directions of and support for vocational education in Massachusetts.

## **APPENDICES**



APPENDIX A

STATE POLICYMAKERS INTERVIEWED

James Crain  
Chair, State Board of Education

Rep. Kenneth Lemanski  
House Committee on Ways and Means

James Grande  
Member, State Board of Education

Rep. Marilyn Travinski  
Chair, Joint Committee on  
Commerce and Labor

Robert Schwartz  
Governor's Special Advisor for  
Education

B.J. Rudman  
Assistant Secretary for Management  
Executive Office for  
Administration and Finance

Harold R. Raynolds  
Commissioner of Education

David F. Cronin  
Associate Commissioner  
Division of Occupational Education

Rep. Nicholas Paleologos  
Co-chair, Joint Legislative  
Committee on Education

Sen. Richard Kraus  
Co-chair, Joint Legislative  
Committee on Education

Franklin Jennifer  
Chancellor, Board of Regents

Eric Van Loon  
Undersecretary, Executive Office  
of Economic Affairs

Catherine Stratton  
Director, Office of Training and  
Employment Policy

APPENDIX B  
INTERVIEW GUIDE FOR STATE POLICYMAKERS

Introduction. We are under contract with the State Advisory Council on Vocational Education to interview state policymakers to obtain their views on the objectives of vocational education in Massachusetts, their recommendations on future objectives and purposes, and their suggestions for needed changes in vocational education in the Commonwealth. These interviews are, of course, confidential. Your name may be listed among the persons interviewed, but no direct attribution of comments to individuals will be made.

NOTE: Questions were often tailored to the individual respondent with more specific questions asked as appropriate.

1. At the outset of each interview, respondents were asked to describe their historical and current involvement with and interest in vocational education.
2. What do you see as the primary objectives of secondary vocational education?
3. To what extent do you view specific skills training as a goal of secondary vocational education?
4. What do you see as the primary objectives of postsecondary vocational education?
5. What do you see as the relative emphasis that should be placed on secondary and postsecondary vocational education?
6. Do you see a major role for vocational education in education, employment, and economic development in Massachusetts? Please describe.
7. What changes would you like to see in vocational education in Massachusetts?
8. Are there particular improvements you would emphasize?
9. What are your recommendations on future objectives and purposes? What efforts are currently underway?

[At the end of the interview, check to see whether respondent has mentioned outcomes in each area: equal access, student outcomes, economic development, system improvement, and system coordination. If not, ask directly what s/he feels is the role of vocational education in that area. For example, what should be the emphasis in vocational education on special population groups?]

## APPENDIX C

### COMMUNITIES AND RESPONDENTS IN THE LOCAL PROVIDERS SURVEY

From around the Commonwealth, ten communities were selected that varied in size, location, and whether they were experiencing economic depression (a criterion for concentrated funding under the Carl D. Perkins Vocational Education Act). The ten communities selected were:

Boston	Springfield
Worcester	New Bedford
Fitchburg	North Adams
Haverhill	Beverly
Framingham	Harwich

Within each community, five individuals in vocational education or related fields were interviewed. They were:

- the director of vocational education for the school district (or, in the absence of a director, the principal of the comprehensive high school);
- the superintendent of the area or city vocational technical school;
- the president of the local community college;
- the regional director of the JTPA program; and
- the director of a community-based organization or a member of the local advisory council for vocational education.

Of the 50 providers (ten in each category), 48 completed the telephone survey. Their responses are included in Appendix D.



APPENDIX D

LOCAL TELEPHONE SURVEY  
SELECTED RESPONSES

SURVEY OF VOCATIONAL EDUCATION GOALS IN MASSACHUSETTS

Our purpose in conducting this telephone survey is to obtain your views about the vocational education system in Massachusetts. We are emphasizing the word system because we are not asking questions about individual vocational education schools or programs. Rather, all of our questions concern the vocational education system as a whole. However, as you will see when you review the attached questionnaire, we do ask separate questions about secondary vocational education and postsecondary vocational education.

The first eight questions focus on the goals of vocational education in Massachusetts. Four of these questions consider the importance of various goals; two questions ask about the achievement of goals by the Massachusetts educational system; and two questions are concerned with a variety of factors that may influence the achievement of these goals.

The goals statements listed on the following pages are drawn from state and federal documents on vocational education (such as the State Plan for Vocational Education in Massachusetts, Chapter 74 regulations, and other policy statements issued by state agencies) as well as from recent interviews with state policymakers. It is important to note here that the goals are not listed in order of their importance. They are randomly ordered. Please read the goals statements and questions carefully and then, during our telephone conversation, tell us your answers to each question.

Following the questions on goals are two questions about possible improvements to the Massachusetts vocational education system. The survey concludes with three general questions asking for your overall views of vocational education in Massachusetts. Again, we are asking you to read carefully these final five questions to prepare your answers which we will obtain during our telephone interview.

Thank you for your time and attention.

IMPORTANCE OF GOALS AT THE SECONDARY LEVEL

1. How do you rate the importance of each of the following goals for secondary vocational education in Massachusetts?

	Very Important		Not Important		Don't Know
	1	2	3	4	5
<hr/>					
Ensure that students master basic skills	42	2	2	1	0
Teach students specific occupational skills	25	14	10	1	1
Enhance students' career decision-making	20	22	4	0	1
Provide "hands-on" learning for students	25	15	4	2	1
Prevent students from dropping out of school	26	10	6	2	3
Enable students to pursue post-high-school education	12	17	15	0	2
Coordinate vocational education and employment and training at the state level	16	12	14	1	2
Coordinate vocational education and employment and training at the local level	28	9	7	1	1
Promote economic growth and development	13	15	11	5	2
Create a skilled workforce	25	13	5	2	1
Ensure access to vocational education for unserved and underserved groups	26	15	6	0	3
Prepare special population groups for participation in the work force	22	15	6	0	2

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IMPORTANCE OF GOALS AT THE SECONDARY LEVEL

2. Of those goals listed above, please list what you see as the three most important goals for secondary vocational education in Massachusetts?

GOALS	RANKING OF MOST IMPORTANT		
	1	2	3
Ensure that students master basic skills	33	5	1
Teach students specific occupational skills	3	9	3
Enhance students' career decision-making	1	6	7
Provide "hands-on" learning for students	1	10	4
Prevent students from dropping out of school	2	4	3
Enable students to pursue post-high-school education	0	0	2
Coordinate vocational education and employment and training at the state level	0	3	3
Coordinate vocational education and employment and training at the local level	1	0	5
Promote economic growth and development	0	1	1
Create a skilled workforce	1	2	5
Ensure access to vocational education for unserved and underserved groups	2	6	7
Prepare special population groups for participation in the work force	0	3	0

ACHIEVEMENT OF GOALS AT SECONDARY LEVEL

3. How well do you feel each of the following goals for secondary vocational education are being achieved in Massachusetts?

	Achieved Very Well		Not Achieved		Don't Know	
	1	2	3	4	5	
Ensure that students master basic skills	4	12	17	9	3	3
Teach students specific occupational skills	15	19	9	3	0	2
Enhance students' career decision-making	3	12	23	8	0	2
Provide "hands-on" learning for students	18	15	12	1	0	2
Prevent students from dropping out of school	0	6	20	14	4	4
Enable students to pursue post-high-school education	2	7	18	13	1	3
Coordinate vocational education and employment and training at the state level	1	8	14	14	8	3
Coordinate vocational education and employment and training at the local level	3	13	20	7	3	2
Promote economic growth and development	6	8	20	8	4	2
Create a skilled workforce	7	11	18	8	0	2
Ensure access to vocational education for unserved and underserved groups	3	11	19	9	2	4
Prepare special population groups for participation in the work force	1	5	17	17	3	3

ACHIEVEMENT OF GOALS AT SECONDARY LEVEL

4. Of these goals listed above, which three goals do you see as being best achieved by secondary vocational education in Massachusetts?

GOALS	RANKING OF BEST ACHIEVED GOALS		
	1	2	3
Ensure that students master basic skills	9	3	1
Teach students specific occupational skills	17	11	2
Enhance students' career decision-making	4	7	1
Provide "hands-on" learning for students	9	11	14
Prevent students from dropping out of school	0	1	2
Enable students to pursue post-high-school education	0	2	3
Coordinate vocational education and employment and training at the state level	2	1	0
Coordinate vocational education and employment and training at the local level	0	2	4
Promote economic growth and development	1	1	0
Create a skilled workforce	0	1	6
Ensure access to vocational education for unserved and underserved groups	2	4	4
Prepare special population groups for participation in the work force	0	0	4

IMPORTANCE OF GOALS AT POSTSECONDARY LEVEL

5. How do you rate the importance of each of the following goals for postsecondary vocational education in Massachusetts?

	Very Important		Not Important		Don't Know	
	1	2	3	4	5	
Teach student specific occupational skills	31	12	2	1	0	2
Enhance students' career decision-making	21	19	4	2	0	2
Provide "hands-on" learning for students	19	22	5	0	0	2
Coordinate vocational education and employment and training at the state level	21	14	8	1	2	2
Coordinate vocational education and employment and training at the local level	27	8	10	0	1	2
Promote economic growth and development	17	17	8	3	1	2
Create a skilled workforce	29	14	1	1	1	2
Ensure access to vocational education for unserved and underserved groups	26	13	3	0	3	2
Prepare special population groups for participation in the work force	19	16	8	0	3	2

IMPORTANCE OF GOALS AT POSTSECONDARY LEVEL

6. Of those goals listed above, what do you see as the three most important goals for postsecondary vocational education in Massachusetts?

RANKING OF MOST IMPORTANT GOALS

GOALS	1	2	3
Teach student specific occupational skills	20	3	4
Enhance students' career decision-making	10	7	1
Provide "hands-on" learning for students	2	8	2
Coordinate vocational education and employment and training at the state level	3	1	2
Coordinate vocational education and employment and training at the local level	2	5	2
Promote economic growth and development	1	5	2
Create a skilled workforce	5	7	13
Ensure access to vocational education for unserved and underserved groups	2	5	10
Prepare special population groups for participation in the work force	0	1	5

ACHIEVEMENT OF GOALS AT POSTSECONDARY LEVEL

7. How well do you feel each of the following goals for postsecondary vocational education are being achieved in Massachusetts?

	Achieved Very Well		Not Achieved		Don't Know	
	1	2	3	4	5	
Teach student specific occupational skills	14	15	13	1	0	5
Enhance students' career decision-making	4	13	23	3	0	5
Provide "hands-on" learning for students	8	20	14	1	0	5
Coordinate vocational education and employment and training at the state level	1	6	21	10	5	5
Coordinate vocational education and employment and training at the local level	4	8	15	7	3	6
Promote economic growth and development	3	11	19	7	3	5
Create a skilled workforce	6	17	17	2	0	6
Ensure access to vocational education for unserved and underserved groups	3	14	14	9	4	4
Prepare special population groups for participation in the work force	2	13	17	8	4	4

ACHIEVEMENT OF GOALS AT POSTSECONDARY LEVEL

8. Of these goals listed above, which three goals do you see as being best achieved by postsecondary vocational education in Massachusetts?

RANKING OF BEST ACHIEVED GOALS

GOALS	1	2	3
Teach student specific occupational skills	21	2	4
Enhance students' career decision-making	8	9	1
Provide "hands-on" learning for students	4	8	4
Coordinate vocational education and employment and training at the state level	0	1	0
Coordinate vocational education and employment and training at the local level	4	1	3
Promote economic growth and development	2	1	3
Create a skilled workforce	0	7	7
Ensure access to vocational education for unserved and underserved groups	2	5	5
Prepare special population groups for participation in the work force	1	0	5

IMPROVING VOCATIONAL EDUCATION

9. If you were to recommend improvements in vocational education in Massachusetts, how important would you rate each of the following:

	Very Important		Not Important		Don't Know	
	1	2	3	4	5	
Expand recruitment for special population groups	17	10	15	2	4	0
Expand guidance and counseling support services	28	7	7	4	2	0
Promote new materials and curricula development	21	15	7	4	1	0
Develop new models for delivering vocational education	21	12	13	2	0	0
Develop opportunities for work-related experience	25	16	6	1	0	0
Improve labor market relevance of vocational education programs	21	19	7	1	0	0
Improve quality of professional staff development	29	12	7	0	0	0
Increase vocational education funding	29	12	6	0	1	0
Modernize and update equipment	23	17	8	0	0	0
Improve state level coordination of vocational education and employment training	19	15	10	2	2	0
Improve local level coordination of vocational education and employment training	24	18	5	1	0	0
Improve local linkages with other educational programs (e.g., secondary/postsecondary)	24	18	4	0	1	1

## IMPROVING VOCATIONAL EDUCATION

10. Using the items above, what would you recommend as the three most important improvements to be made in the vocational education system in Massachusetts?

## RANKING OF MOST IMPORTANT

	1	2	3
Expand recruitment for special population groups	1	3	3
Expand guidance and counseling support services	5	4	4
Promote new materials and curricula development	6	4	1
Develop new models for delivering vocational education	4	6	3
Develop opportunities for work-related experience	2	4	7
Improve labor market relevance of vocational education programs	3	4	5
Improve quality of professional staff development	9	5	2
Increase vocational education funding	5	6	4
Modernize and update equipment	3	3	7
Improve state level coordination of vocational education and employment training	1	2	2
Improve local level coordination of vocational education and employment training	0	3	5
Improve local linkages with other educational programs (e.g., secondary/postsecondary)	2	1	1



